REMARKS

Claims 1-6 and 9-14 are pending in this application. Claim 1 has been amended to recite that "the carbon source consists essentially of" in place of "the carbon source substantially consists of" for purposes of clarification and not to limit its scope. Claims 1 and 3-6 are directed to the elected invention. Claims 2 and 9-14 are directed to a non-elected invention and may be cancelled by the examiner upon the allowance of the claims directed to the elected invention. The amendments to the claims do not introduce any new matte, do not raise any new issues and ,as a minimum, reduces the issues for Appeal.

The rejection of claims 1 and 3-6 under 35 USC 112, second paragraph has been overcome by reciting "consists essentially of" in place of "substantially consists of". It is understood, that the term "consisting essentially of" does not exclude small amounts of other components including fatty acids, which for instance might be present as being impurity in the oil or fat.

Claims 1 and 3-6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Japanese Patent Application No. 2001/340078 to Satoshi et al. (hereinafter also referred to as "Satoshi") in view of International Publication No. WO 96/25509 to Naylor et al. (hereinafter also referred to as "Naylor"). The cited references do not render obvious claims 1 and 3-6.

As appreciated by the Examiner, JP2001-340078 to Satoshi differs from the present invention in that it does not teach keeping the specific substrate feed rate of the carbon source at a constant value. However, according to the Office Action it is obvious to apply the specific substrate feed rate of a carbon source in Naylor et al, in the production method of polyester as described in Satoshi et al.

The conclusion in the Office Action is incorrect. As mentioned above, the disclosure by Satoshi differs from the present invention in that specific substrate feed rate is not described. The disclosure by Naylor differs from the present invention in that production of copolyester is not described, or propionic acid is necessary to produce a copolyester.

Naylor describes in lines 2 to 12 on page 4 that if the aliphatic acid contains an even number of carbon atoms and is the sole carbon source, the product, polyhydroxyalkanoate (PHA), is substantially or wholly polyhydroxy-butyrate (PHH) homopolymer, and if polyhydroxybutyrate-valerate copolymer (PHBV) is required, there should be present a carbon source such as propionic acid. Naylor does not describe that a copolyester can be produced without adding other carbon sources such as propionic acid.

Accordingly, a skilled person applying the specific substrate feed rate of a carbon source in Naylor to the production of copolyester in Satoshi, would inevitably use propionic acid as required by Naylor. The rejection relies upon only the specific substrate feed rate of a carbon source in Naylor in isolation and disregards of the entire disclosure and applied it to Satoshi, without the propionic acid required by Naylor. However, this conclusion is not reasonable because Naylor teaches that copolyester cannot be produced as long as a carbon source such as rapeseed oil is used without propionic acid. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. Please see *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc.*, 230 U.S.P.Q. 46 (Fed. Cir. 1986) and *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983) . Where a reference discourages a person skilled in the art from doing what is claimed, the reference establishes "the very antithesis of obviousness." *In re Buehler* 185 USPQ 781 (CCPA 1975).

In addition, according to Naylor, in order to control the monomer content of the copolyester, it is necessary to modify the composition of the culture medium, by changing the mixing rate of rapeseed oil and phosphate, or by replacing the rapeseed oil by corn oil, for example.

In contrast, in the present invention, the monomer content of the copolyester can be changed by controlling the specific substrate feed rate of a carbon source which consists essentially of natural oils or fats, or fractionated oils or fats, without using expensive fatty acids. This effect would not be expected based on Naylor.

Satoshi only describes controlling the composition of the copolyester by changing the mixing ratio of carbon sources. It is not possible from Satoshi to expect that the

composition of copolyester can be controlled by modifying the specific substrate feed rate of a carbon source, without changing the mixing ratio of carbon source itself.

The mere fact that the cited art may be modified in the manner suggested in the Office Action does not make the modification obvious, unless the cited art suggests the desirability of the modification or adequate rationale exists to do so. No such suggestion appears in the cited art in this matter nor has the requisite rationale been adequately articulated. . The Examiner's attention is kindly directed to *KSR Int'l Co. v. Teleflex, Inc*, 127 S. Ct. 1727 (2007); *In re Lee* 61 USPQ2d 1430 (Fed. Cir. 2002), *In re Dembiczak et al.* 50 USPQ2d. 1614 (Fed. Cir. 1999), *In re Gordon*, 221 USPQ 1125 (Fed. Cir. 1984), *In re Laskowski*, 10 USPQ2d. 1397 (Fed. Cir. 1989) and *In re Fritch*, 23, USPQ2d. 1780 (Fed. Cir. 1992).

Also, the cited art lacks the necessary direction or incentive to those of ordinary skill in the art to render a rejection under 35 USC 103 sustainable. The cited art fails to provide the degree of predictability of success of achieving the properties attainable by the present invention as discussed above needed to sustain a rejection under 35 USC 103. See *KSR Int'l Co. v. Teleflex, Inc*, supra; *Diversitech Corp. v. Century Steps, Inc.* 7 USPQ2d 1315 (Fed. Cir. 1988), *In re Mercier*, 187 USPQ 774 (CCPA 1975) and *In re Naylor*, 152 USPQ 106 (CCPA 1966). As discussed above, the improved solubility is not suggested by the cited art.

Moreover, the properties of the subject matter and improvements which are inherent in the claimed subject matter and disclosed in the specification are to be considered when evaluating the question of obviousness under 35 USC 103. See *KSR Int'l Co. v. Teleflex, Inc*, supra; *Gillette Co. v. S.C. Johnson & Son, Inc.*, 16 USPQ2d. 1923 (Fed. Cir. 1990), *In re Antonie*, 195, USPQ 6 (CCPA 1977), *In re Estes*, 164 USPQ 519 (CCPA 1970), and *In re Papesch*, 137 USPQ 43 (CCPA 1963).

No property can be ignored in determining patentability and comparing the claimed invention to the cited art. Along these lines, see *In re Papesch*, supra, *In re Burt et al*, 148 USPQ 548 (CCPA 1966), *In re Ward*, 141 USPQ 227 (CCPA 1964), and *In re Cescon*, 177 USPQ 264 (CCPA 1973).

In view of the above, consideration and allowance are respectfully solicited.

In the event the Examiner believes an interview might serve in any way to advance the prosecution of this application, the undersigned is available at the telephone number noted below.

The Office is authorized to charge any necessary fees due with this paper to Deposit Account No. 22-0185, under Order No. 21581-00476-US from which the undersigned is authorized to draw.

Dated: October 4, 2010

Respectfully submitted,

Electronic signature: /Burton A. Amernick/
Burton A. Amernick
Registration No.: 24,852
CONNOLLY BOVE LODGE & HUTZ LLP
1875 Eye Street, NW
Suite 1100
Washington, DC 20006
(202) 331-7111
(202) 293-6229 (Fax)
Attorney for Assignee